

REMARKS

The present Amendment amends claims 13, 16-19 and 21 and cancels claims 14, 15 and 20. Therefore, the present application has pending claims 13, 16-19 and 21.

Support for Amendments

The amendments are fully supported by the disclosure. For example, the amendments to the claims are supported by: Fig. 1; page 12, line 28; page 13, lines 6-9; Fig. 3, item 52; page 13, lines 19-27; page 12, lines 5-11; page 13, lines 2-6; Fig. 7; Fig. 9; page 27, lines 6-16; and page 19, lines 14-25.

35 U.S.C. §103 Rejections

Claims 13-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,618,074 to Seeley et al. ("Seeley") in view of U.S. Patent No. 7,250,964 to Handa ("Handa"). As previously indicated, claims 14, 15 and 20 were canceled. Therefore, this rejection regarding claims 14, 15 and 20 is rendered moot. Regarding the remaining claims 13, 16-19 and 21, this rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 13, 16-19 and 21, are not taught or suggested by Seeley or Handa, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to an image storage and delivery method and system as recited, for example, in independent claims 13 and 19.

The present invention, as recited in claim 13, and as similarly recited in claim 19, provides an image storage and delivery method for recording and reproducing

image data from a web camera via a network. The method includes: a first temporarily storing step of temporarily storing, by the web camera, images in a first memory, wherein the web camera takes the images consecutively in time-series; a normal recording step of intermittently receiving, by a storage server, image data from the first memory, wherein the storage server records the image data in a first storage area of a disk device as first data with a first image quality and time stamps; and a second temporarily storing step of temporarily storing, by the web camera, predetermined frames of the images taken by the web camera as second data with a second image quality in a second memory.

According to the present invention, when an alarm occurs, the storage server performs: a requesting step of requesting the web camera to deliver the second data representative of at least one of the images taken by the web camera before the alarm occurred, and an alarm recording step of recording the second data from the second memory in a second storage area of the disk device with the second image quality and a time stamp without stopping the normal recording step, whereby the second data and part of the first data are representative of an image at the same time.

Also according to the present invention, during reproduction of data representative of the image at the same time, the method includes a reproduction step of preferentially receiving, by a client terminal, the recorded second data, having a higher image quality than the first data, rather than the first data, and seamlessly reproducing, by the client terminal, the first data and the second data along the time series when an instruction for seamless playback is received from a user. The prior art does not teach or suggest all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record.

Specifically, the features are not taught or suggested by either Seeley or Handa, whether taken individually or in combination with each other.

Seeley teaches a central alarm computer for a video security system. However, there is no teaching or suggestion in Seeley of the image storage and delivery method and system as recited in claims 13 and 19 of the present invention.

Seeley discloses where a video security system (10) monitors the premises (F) to detect unwanted intrusions on the premises. A site control unit (12) obtains and evaluates the images to determine if an intrusion has occurred, and provides an indication if an intrusion is detected. A central station (CS) includes a plurality of workstations (106), and a central alarm computer (104). The computer is responsive to an alarm indication to cause video images, and audio, to be transmitted to the central station for presentation at one of the workstations selected by the computer. Additionally, the computer supplies site specific data to the workstation for display with the video images. Control signals from the workstation back to the site are routed through the computer.

One feature of the present invention, as recited in claim 13, and as similarly recited in claim 19, includes where when an alarm occurs, the storage server performs: a requesting step of requesting the web camera to deliver the second data representative of at least one of the images taken by the web camera before the alarm occurred; and an alarm recording step of recording the second data from the second memory in a second storage area of the disk device with the second image quality and a time stamp without stopping the normal recording step, whereby the second data and part of the first data are representative of an image at the same time. Seeley does not disclose this feature.

For example, Seeley does not teach or suggest where when an alarm occurs, the storage server requests the web camera to deliver the second data

representative of at least one of the images taken by the web camera before the alarm occurred. To support the assertion that Seeley teaches a requesting step, as previously presented, the Examiner cites column 6, lines 14-67. However, neither the cited text nor any other portion of Seeley teaches this feature, as now more clearly recited in the claims.

With reference to column 6, lines 42-53, Seeley provides "When an intruder is detected, SCU 12 performs a number of tasks. First, the SCU acquires and stores a full resolution "snapshot" X of the event. . . Snapshots of the scene are taken at predetermined intervals after an intrusion is detected." (Emphasis added). This is quite different from the present invention, which provides where an image is stored before the alarm occurs. Accordingly, the present invention distinguishes over Seeley.

Furthermore, it appears that the Examiner may have misinterpreted that the "second image data" is later than the "first image data" in a serial time order. Accordingly, Applicants have amended the claims to more clearly describe the features of the present invention.

Another feature of the present invention, as recited in claim 13, and as similarly recited in claim 19, includes where during reproduction of data representative of the image at said same time, the method includes a reproduction step of preferentially receiving, by a client terminal, the recorded second data, having a higher image quality than the first data, rather than the first data, and seamlessly reproducing, by the client terminal, the first data and the second data along the time series when an instruction for seamless playback is received from a user. Seeley does not disclose this feature.

To support the assertion that Seeley teaches a reproduction step, the Examiner cites column 3, lines 15-25. However, neither the cited text nor any other portion of Seeley teaches or suggests the claimed feature.

As described in column 9, lines 5-6, Seeley explicitly provides “Upon request by the operator, these snapshots are transmitted.” This is not the same as the present invention, where when an instruction for seamless playback is received from a user, a client terminal preferentially receives the recorded second data, which has a higher image quality than the first data, and seamlessly reproducing the first data and the second data. Accordingly, the present invention is different from Seeley.

Furthermore, as shown in Fig.10, Seeley provides where thumbnails and snapshots are displayed on a quadrant 602b and a quadrant 602c, respectively. In this way, Seeley neither teaches nor suggests seamless reproduction as in the present invention. And with reference to column 3, lines 15-25, Seeley merely describes a conventional method of providing an operator with a high quality sample. This is not the same as the seamless reproduction of the present invention.

Therefore, Seeley fails to teach or suggest “wherein when an alarm occurs, the storage server performs: a requesting step of requesting the web camera to deliver the second data representative of at least one of the images taken by the web camera before the alarm occurred, and an alarm recording step of recording the second data from the second memory in a second storage area of the disk device with the second image quality and a time stamp without stopping the normal recording step, whereby the second data and part of the first data are representative of an image at the same time” as recited in claim 13, and as similarly recited in claim 19.

Furthermore, Seeley fails to teach or suggest “during reproduction of data representative of the image at said same time, a reproduction step of preferentially

receiving, by a client terminal, the recorded second data, having a higher image quality than the first data, rather than the first data, and seamlessly reproducing, by the client terminal, the first data and the second data along the time series when an instruction for seamless playback is received from a user” as recited in claim 13, and as similarly recited in claim 19.

The above noted deficiencies of Seeley are not supplied by any of the other references of record, namely Handa, whether taken individually or in combination with each other. Therefore, combining the teachings of Seeley and Handa in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Handa teaches a data transmitting apparatus. However, there is no teaching or suggestion in Handa of the image storage and delivery method and system as recited in claims 13 and 19 of the present invention.

Handa discloses a data transmitting apparatus that includes a sensor. When an alarm is generated from the sensor, a post-alarm recording is started, and a plurality of still image files is written to an alarm storage area of an SDRAM by a memory control circuit. The still image files within the alarm storage area are transmitted to an image accumulating server through an NIC during a period from occurrence of the alarm to becoming full of the alarm storage area. Furthermore, still image files created in a normal recording after the post-alarm recording are intermittently transmitted to the image accumulating server at an arbitrary file transmission cycle. The still image files which have not been transmitted yet out of the still image files in the alarm storage area are transmitted to the image accumulating server at intervals of the file transmission operations in the normal recording mode.

One feature of the present invention, as recited in claim 13, and as similarly recited in claim 19, includes where when an alarm occurs, the storage server performs: a requesting step of requesting the web camera to deliver the second data representative of at least one of the images taken by the web camera before the alarm occurred; and an alarm recording step of recording the second data from the second memory in a second storage area of the disk device with the second image quality and a time stamp without stopping the normal recording step, whereby the second data and part of the first data are representative of an image at the same time. Handa does not disclose this feature.

Another feature of the present invention, as recited in claim 13, and as similarly recited in claim 19, includes where during reproduction of data representative of the image at said same time, the method includes a reproduction step of preferentially receiving, by a client terminal, the recorded second data, having a higher image quality than the first data, rather than the first data, and seamlessly reproducing, by the client terminal, the first data and the second data along the time series when an instruction for seamless playback is received from a user. Handa does not disclose this feature.

Therefore, Handa fails to teach or suggest “wherein when an alarm occurs, the storage server performs: a requesting step of requesting the web camera to deliver the second data representative of at least one of the images taken by the web camera before the alarm occurred, and an alarm recording step of recording the second data from the second memory in a second storage area of the disk device with the second image quality and a time stamp without stopping the normal recording step, whereby the second data and part of the first data are representative of an image at the same time” as recited in claim 13, and as similarly recited in claim 19.

Furthermore, Handa fails to teach or suggest “during reproduction of data representative of the image at said same time, a reproduction step of preferentially receiving, by a client terminal, the recorded second data, having a higher image quality than the first data, rather than the first data, and seamlessly reproducing, by the client terminal, the first data and the second data along the time series when an instruction for seamless playback is received from a user” as recited in claim 13, and as similarly recited in claim 19.

Both Seeley and Handa suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Seeley and Handa in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 13, 16-19 and 21 as being unpatentable over Seeley in view of Handa are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 13, 16-19 and 21.

In view of the foregoing amendments and remarks, Applicants submit that claims 13, 16-19 and 21 are in condition for allowance. Accordingly, early allowance of claims 13, 16-19 and 21 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of BRUNDIDGE & STANGER, P.C., Deposit Account No. 50-4888 (referencing Attorney Docket No. ASA-5444).

Respectfully submitted,

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